NPDES PERMIT MODIFICATION
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
WASTEWATER TREATMENT PLANT AT BLUE PLAINS
WASHINGTON, DC

NPDES Permit Number DC0021199

Response to Comments
August 18, 2006 Public Noticed Draft Permit Modification
December 14, 2006 Public Noticed Draft Permit Modification
April 5, 2007 Final Modified Permit

1. General

On August 18, 2006, the United States Environmental Protection Agency, Region III (EPA) offered for public comment a modification of the National Pollutant Discharge and Elimination System (NPDES) permit for the Blue Plains Advanced Wastewater Treatment Plant. The underlying permit was issued on January 24, 2003 and was previously modified on December 16, 2004. The public comment period for this modification was 30 days, however, at the request of the District of Columbia Water and Sewer Authority (WASA), the public comment period was extended for an additional 15 days.

In addition, based in part upon comments received on certain aspects of the August 18, 2006 proposed modification, on December 14, 2006 EPA issued a revised proposed permit modification for review and comment. This Response to Comments responds to comments received on both the August 18, 2006 and the December 14, 2006 proposals.

The permit at issue regulates the discharge of treated municipal wastewater from the Blue Plains Wastewater Treatment Plant and treated and untreated storm water through the District of Columbia's combined sewer system. EPA made the determination to modify the permit in light of its review of the permit conditions, as well as certain issues raised by the permittee and by Friends of the Earth and the Sierra Club, each of which filed a petition with the Environmental Appeals Board requesting review of certain provisions of the December 16, 2004 modification of th January 24, 2003 permit.

The proposed modifications to the January 24, 2003 permit, which were open for public comment and for which EPA received comments, were as follows:

A. August 18, 2006 Proposed Modifications

1. Replace the existing water quality-based requirement for Combined Sewer Overflows (CSOs) found at Part III.E.1 with a provision indicating that the performance standards for the Long Term Control Plan (LTCP) will be the water quality-based effluent limits for CSO discharges, and that until they are in place a general water quality standards compliance provision similar to that contained in the NPDES permit issued in 1997 will apply;

2. Remove the water quality-based numeric effluent limits contained in Part III.E.2, which are derived from specific District of Columbia total maximum daily loads (TMDLs) for pollutants (total suspended solids and biochemical oxygen demand) in the Anacostia River and for Rock Creek and its tributaries, along with the related monitoring and reporting requirements contained in Part III. Section E.3. and 4.; and

3. Replace the existing nitrogen discharge goal with an interim effluent limit for nitrogen, amend the existing nitrogen goal, reducing the amount and include a schedule for submission of a plan to reduce nitrogen discharges in accordance with the Chesapeake Bay Agreement.

B. December 14, 2006 Proposed Modification

This proposal was limited to comments on the following:

1. Replace the nitrogen discharge goal with a final nitrogen limit, effective upon permit issuance - rather than interim limit and modified goal- reflecting the Ambient Water Quality Criteria for the Chesapeake Bay and its Tidal Tributaries (EPA-903-R-03-002), which have been incorporated into the District of Columbia Water Quality Standards, as well as the water quality standards of the Commonwealth of Virginia and the state of Maryland.

For each of the comment periods, EPA received comments from six entities: the State of Maryland, the Commonwealth of Virginia, the District of Columbia Water and Sewer Authority (WASA), the Chesapeake Bay Foundation, the Blue Plains Regional Committee of the District of Columbia Council of Governments (COG), and Friends of the Earth and the Sierra Club by their counsel, EarthJustice. In addition, the U.S. Fish and Wildlife Service and the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service commented on the December 14, 2006 request for public comment.

The following is a summary of the comments that EPA received during the two public comment periods and EPA's responses thereto:

II. Comments and Responses - August 18, 2006 Public Notice of Draft Permit Modification

A. Comments Received from the District of Columbia Water and Sewer Authority (WASA). The following comments were received by letter dated October 3, 2006, from John T. Dunn, P.E. Chief Engineer/Deputy General Manager.

1. Revisions to the total nitrogen effluent limit.

Comment: EPA has failed to provide a reasoned explanation of the basis for the proposed interim limit. EPA relied on very limited, highly variable historic data to establish the

proposed interim limit. EPA has not explained the data that it relied on or the basis for its conclusion that WASA can meet it.

Response: EPA analyzed historical nitrogen discharge data provided by WASA, reflecting the actual nitrogen discharges for the years 2003 through 2004. These years were chosen because they represent both low temperatures and high volume flows which are the parameters which have been shown to most critically impact the operation of the Blue Plains biological system. Based on EPA's analysis of actual plant data for these years **(**see Volume 9, document number 182, attached file *365 days ave TN vs temp.070506 xls*, of the administrative record), EPA determined that this would be an appropriate interim limit.

However, as reflected in the December 14, 2006 public notice of proposed permit amendment, EPA has decided to impose the final nitrogen limit of 4.689 million pounds per year, based upon the allocation for the Blue Plains facility developed through the Chesapeake Bay Tributary strategies, and consistent with applicable water quality standards.

Comment: Is the reference period the entire calendar years of 2003 - 2004 or some combination of months from these years?

Response: The reference period for the interim limit was calculated from data provided by WASA for the calendar years 2003 - 2004.

Comment: EPA has not adequately explained the basis for its conclusion that WASA can meet the limit with increased loadings to the plant. If the limit is based upon the fact that the design flow of 370 mgd is greater than the current annual average flow of 338 mgd, and that this difference adequately accounts for increased flows and low temperature conditions in the future, the limit is incorrect. Because the basis for the limit is not clear, WASA is not afforded adequate opportunity to comment.

Response: Given that the permit expires on February 28, 2008, EPA would not have expected the loadings to increase significantly during that time. EPA anticipated that by the time the next permit cycle begins, WASA would have a plan for achievement of the nitrogen limit, and the final plan should be placed in the permit, with a schedule for achievement of the limit which would be contained in a separate enforceable document.

Comment: The current peak flow factors expire in June of 2007, however, the proposed nitrogen limit assumes that the current factors will continue for the life of the permit.

Response: The proposed interim limit did not include any assumptions about the peak flow factors. As explained in the fact sheet for the January 2003 issued permit; during an anticipated construction period at Blue Plains, a reduction of approximately 25% in the amount of wet weather flows to receive full treatment and primary disinfection was given to allow for the time that process facilities would be out of service. The existing permit contains a provision whereby WASA may seek to extend the reduced peak flow conditions of I.B. (1b)c. WASA has indicated to EPA that it intends to do so.

Comment: Paragraph 4 of a document contained in the Administrative Record entitled, "EPA's Proposed Nitrogen Limit - Blue Plains NPDES Permit" states that EPA used an annual rolling average nitrogen concentration of 6.49 mg/l from 2002, a design flow of 370 mgd and the current peak flow now in the permit to derive the limit. This does not correspond to the limit proposed in the permit modification. The document states that the proposed limit is 7.321 million pounds per year, when the proposed limit in the permit modification is 8.6 million pounds per year. The "nitrogen limit matrix" in the Administrative Record refers to 8.6 million pounds per year as th nitrogen goal in the permit, while the current goal is 8,467,200 pounds per year. EPA must explain the basis for the limits and the analysis used to derive it.

Response: As the documents in the administrative record illustrate, EPA performed a number of statistical calculations using actual Blue Plains performance data to understand the performance of the plant. The data was provided by WASA and it represented several years (2002 through 2006) of actual operating data using the existing process equipment and actual meteorologic conditions. EPA ran the statistical models and found several things, including but not limited to the fact that over time, plant performance improved. Using conservative operating assumptions, EPA found that during the calendar year 2004 - 2005, its best year, WASA was able to meet a total nitrogen annual limit of 5,800,000 pounds per year. This was above the DC allocation of 4.689 million pounds per year for the Blue Plains facility but a considerable reduction from the total nitrogen goal expressed in the 2003 issued permit.

However, at this point that is moot, as EPA is including the Chesapeake Bay final nitrogen limit in the final permit modification.

Comment: The proposed interim limit is unlawful because it was not developed in accordance with EPA's rules, and fails to account for all the significant variables that will affect WASA's ability to comply with the limit during the time that it is expected to remain in effect.

Response: As noted above, the final modified permit does not contain an interim limit.

Comment: Since there are no secondary treatment standards for nitrogen, an interim nitrogen limit would have to be based on Best Practicable Waste Treatment Technology (BPT). The intent is to establish a limit based on BPT using BPJ. EPA must take into account factors beyond the plant's performance for a short period of time. Other factors to be considered include the absence of facilities to treat nitrogen to meet a specific limit, the plant's limited capacity to remove nitrogen, wet weather flow treatment obligations and the impact of such obligations on the plant's nitrogen removal capacity, planned construction to meet future nitrogen limits, and completion of major rehabilitation projects to increase flow to Blue Plains. EPA failed to follow its regulations when establishing this limit.

Response: As noted above, the final permit modification contains a water quality-based final limit.

Comment: The plant will undergo major construction beginning in 2008 that will

effect its ability to meet nitrogen limits. EPA's statement that it will adjust the limit in the eventuality of such construction is inadequate without future permit modification and public comment.

Response: Any necessary adjustments to the permit conditions after the expiration date of the permit (February 28, 2008) will be addressed in the permit reissuance.

Comment: EPA did not consider the possibility that plant flows would increase above the annual average flow of 370 mgd during the period of time that the interim period was in effect.

Response: EPA did not anticipate a significant increase in flows during the time that the interim limit would be in effect.

Comment: An analysis that conforms to EPA's rules and which account for all the variables would yield a less stringent interim limit than the one proposed by EPA.

Response: EPA believes that while it could have proposed a less stringent interim limit, the data reflecting the Blue Plain's facility's actual discharges, along with plant capacity, supported the interim limit. In any case, EPA has decided to impose a final limit in the modified permit, so this issue is moot.

Comment: WASA's engineering analyses show that permit conditions developed by existing performance data and normal standard of care engineering practice should not be less than 8.5 mg/l for an interim limit and 9.3 mg/l during construction.

Response: EPA has the discretion as to whether to allow an interim limit in this situation. EPA believes that while it could have proposed a less stringent interim limit, the data reflecting the plant's actual discharges, along with plant capacity, supported an interim limit. In any case, EPA has decided not to impose a final limit in the modified permit.

Comment: Regarding the proposed nitrogen goal, the commenter considers the goal to be unnecessary, arbitrary and not achievable.

Response: EPA determined that the goal was appropriate and reasonable, give the plant's past performance, and would serve to promote greater nitrogen reductions. However, EPA has decided to impose a final nitrogen limit, so this issue is moot.

Comment: With regard to the propose implementation schedule, the commenter states that the first two deadlines provide sufficient time for completion, however, the remaining three activities cannot be completed by the deadlines proposed in the modified permit. Commenter states that its original proposed schedule would afford all sufficient time for submission of all activities several weeks in advance of the expiration date of the current permit.

Response: The intent of the proposed schedule was to assure that all deliverables listed in the permit would be submitted to EPA in advance of the expiration date of the permit. No schedule is included in the final permit modification.

2. Revisions to the Phase II CSO Conditions.

Comment: WASA continues its objection to Part III.E.1. This requirement is based on its April 16, 2004 written comments to the prior permit amendment issued on December 16, 2004 and it's January 18, 2005 Petition for Review to the Environmental Appeals Board. WASA incorporates these documents by reference. WASA believes that this provision should be removed in its entirety, as both the existing and proposed water quality standards compliance requirements fail to conform to Section IV.B.2.c of EPA's CSO Control Policy, and therefore, violate Section 402(q) of the Clean Water Act because they are water quality-based requirements that are not authorized by the Act. It is not necessary to include Section III.E.1 in the permit because the permit includes the performance standards specifically called for in Section IV.B.2c of the CSO Policy. Part III.E.1 unfairly exposes WASA to permit non-compliance. EPA's proposal to limit the term of standards compliance requirements in Part III.E.1 does reduce the extent to which it exposes WASA to permit non-compliance, but is still not authorized by the CSO Policy and still unfairly exposes WASA to liability for permit non-compliance.

Response: The use of the LTCP performance standards as the water quality-based effluent limits (WQBELs) for CSO discharges is consistent with the CSO Policy, which requires *inter alia* that a Phase II permit include WQBELs "specifying at least one of the following....; or iv. performance standards and requirements that are consistent with II.C.4.b of the Policy (relating to use of the "demonstration" approach in the development of the LTCP, which is what the permittee elected for Blue Plains). See 59 FR 18696, columns 1 and 2. In addition to setting forth the performance standards in the permit (see Part III., Section C.2.A. 3 - 9), it is appropriate for EPA to indicate that these are the water quality-based effluent limits that apply to the discharges. Given that there are now specific WQBELs, EPA believes that a general requirement to comply with water quality standards is unnecessary and redundant. Therefore, that portion of the provision has been deleted.

To the extent that this comment asserts that the proposed permit provision exposes the permittee to liability for permit non-compliance, this does not address a legal basis upon which to object to the permit condition. In cases where there will not be immediate complete compliance, the permitting authority may enter into a separate compliance agreement with the permittee, which services both to place the permittee on a schedule to achieve compliance and to protect the permittee from third-party actions for non-compliance. In this case, there is a Consent Decree between WASA and the United States in U.S. v District of Columbia Water and Sewer Authority, et al., Civil Action No: 1:002CV02511 (Dist. Ct. D.C.) (LTCP Consent Decree), which requires implementation of the LTCP. The LTCP is anticipated to result in compliance with water quality standards.

Comment: WASA supports the proposed modification to delete the TMDL derived limits at Part III.E.2 - 4.

Response: None required.

Comment: The permit should contain a compliance schedule for implementation

of the selected controls in WASA's LTCP.

Response: This issue was raised by WASA in its appeal of the December 16, 2004 permit modification and this issue is still pending before the Environmental Appeals Board (EAB Appeal No. 05-02). As noted in its response to WASA's comment on the December 16, 2004 permit modification, the CSO Policy provides that, unless the permittee can presently comply with all of the requirements of the Phase II permit, the NPDES authority should include, in an enforceable mechanism, compliance dates on the fastest practicable schedule for those activities directly related to meeting the requirements of the CWA. CSO Policy Part IV.B.2. For major permittees, such as WASA, the compliance schedule should be placed in a judicial order. Id. The order, which the CSO Policy notes is the main focus for enforcing compliance with the Phase II permit (see CSO Policy at V.C.2.) serves to bind the permittee to implement its LTCP. Ideally, prior to issuance of the Phase II permit, the Court will have issued an order, either on consent, reflecting the agreement of the parties or the Court's own determination, as to an appropriate schedule. In this instance, the LTCP implementation schedule is set forth in the LTCP Consent Decree that was entered by the Court on March 23, 2005.

B. Comments received from the Blue Plains Regional Committee (BPRC) of the District of Columbia Council of Governments (COG). The following comments were received by letter dated October 4, 2006, from James A. Caldwell, BPRC Chair, Montgomery County.

1. Total Nitrogen Requirements. The BPRC submitted comments in support of those submitted by WASA. Specifically, its comments are summarized as follows:

Comment: The proposed interim limit of 8.6 million pounds per year should be replaced with more appropriate and achievable limits. The operational restraints of the plant render the proposed limits to be too stringent due to anticipated increased loads to the plant and constraints of process upgrades. BPRC recommends interim nitrogen limits of 10.5 million pounds per year during construction and 9.550 million pounds per year before and following process upgrades.

Response: As discussed in the response to WASA's comments above, EPA has decided to modify the permit to include the final rather than an interim nitrogen limit, based upon the Chesapeake Bay allocation for the Blue Plains facility.

Comment: The current permit language should include critical peak flows. The peak flow language (511/450) in the present permit should be included in the modified permit.

Response: As discussed in the response to WASA's comments above, the proposed interim limit did not include any assumptions about the peak flow factors, although because of anticipated construction during the life of the permit, the issued permit reflects an approximately 25% reduction in the amount of wet weather flows to receive full treatment. The

existing permit contains a provision whereby WASA may seek to extend the reduced peak flow conditions. WASA has indicated to EPA that it intends to do so.

Comment: The proposed nitrogen goal of 5.8 million pounds per year is unachievable and should be removed. EPA did not adequately support its rationale for imposing the limit and the proposed goal cannot be achieved.

Response: EPA based the proposed nitrogen discharge goal on analysis of data of WASA's past performance. Based on an evaluation of that data, EPA concluded that the goal could be achieved, recognizing that this would not have been an enforceable limit. Regardless, EPA's obligation is to issue a permit that complies with the CWA, irrespective of whether the permittee will immediately be in compliance.

Comment: A realistic schedule for submission of a nitrogen action plan and schedule should be worked out between the parties. Despite the critical schedule and timing issues associated with the pilot work and development of engineering plans, WASA has proposed a plan and schedule that includes all the necessary elements and allows sufficient time for EPA review prior to the expiration date of the permit.

Response: EPA has decided not to include a compliance schedule in the permit. EPA expects to continue to engage in discussions with WASA regarding its plans for compliance.

2. Comments relating to the CSO LTCP requirements.

Comment: The proposed language to expand the water quality compliance requirement at Part III.E.1 goes beyond the requirements of the CSO Policy and places an undue burden on WASA.

Response: As more fully discussed in the response to WASA's comments above, the use of the LTCP performance standards as the water quality-based effluent limits for CSO discharges is consistent with the CSO Policy.

Comment: The TMDL-derived limits for the CSO system in Part III.E.2 exceed the requirements of the CSO Policy and are unnecessary given the existence of LTCP-derived performance standards.

Response: EPA has withdrawn the specific TMDL-derived limits in the permit, as the assumptions and requirements of the applicable TMDLs are accounted for in the LTCP.

C. Comments received from the Chesapeake Bay Foundation (CBF). The following comments were received by letter dated October 4, 2006, from Beth McGee, Ph.D.

1. **Nutrient limits.**

Comment: The proposed permit which requires a total nitrogen annual limit of 8.6 million pounds per year is far short of the 4.689 million pounds per year required to meet WQS. This is also above the annual nitrogen discharge goal of 8.467 million pounds per year which is contained in the 2003 permit, and reported annual loads from 2004 of 5.986 million pounds. This would allow an increase in loads of total nitrogen into a water body which is already impaired for nutrients.

Response: EPA has decided to include the final nitrogen limit of 4.689 million pounds per year and to develop a compliance schedule to be placed in a separate enforceable document.

Comment: The schedule contained in the proposed permit does not require meeting the Chesapeake Bay nitrogen allocation by 2010. Accordingly, there is no assurance or specific time frame for meeting the commitments of the Chesapeake Bay 2000 Agreement.

Response: The schedule has been removed from the permit but will be part of a separate compliance agreement.

Comment: EPA is committed to the goals and principles of the Chesapeake Bay Agreement and subsequent modifications to this voluntary agreement. Since the District of Columbia, Maryland and Virginia have revised their water quality standards to incorporate the Bay standards, EPA has included the final Bay allocation for nitrogen in the final permit modification. The permit limit for total nitrogen is contrary to the Chesapeake Bay Foundation's December 2003 petition and EPA's *NPDES Permitting Approach for Discharges of Nutrients in the Chesapeake Bay Watershed.*

Response: While EPA believes that the proposed interim nitrogen limit and the proposed revised nitrogen limit goal were consistent with the CWA, EPA has decided to impose the final nitrogen limit and to work with WASA to develop a plan and schedule for achievement of the limit.

2. Ammonia limit.

Comment: The permit must contain daily limits for ammonia rather than the weekly or monthly averages expressed in the permit. Daily limits ensure protection of aquatic animals from toxicity due to short-term exposure to ammonia.

Response: 40 C.F.R. §122.45 sets forth the requirements for calculating NPDES permit conditions. Section 122.45(d)(2) provides that continuous discharges from POTWs, unless impracticable, shall be stated as average weekly and average monthly discharge limitations. Accordingly, the ammonia limit was correctly calculated for Blue Plains at the time the permit was reissued in 2003. The ammonia limit is not a subject of the proposed permit modification.

D. Comments received from EarthJustice on behalf of the Sierra Club and the Friends of the Earth. The following comments were received by letter dated October 4, 2006 from David S. Baron, Esq.

1. Water quality based requirements for CSOs.

Comment: The proposed permit modifies the water quality standard provision which provides that CSO discharges will meet water quality standards so that it applies only until the LTCP is implemented. This provision violates the anti-backsliding provisions of the CWA and the statutory and regulatory requirements that permits contain limitations sufficient to ensure compliance with water quality standards.

Response: The permitting authority is required to include in the permit effluent limitations necessary to meet water quality standards. At the time of the previous permit reissuance, the permittee had not completed its LTCP. At that time, therefore, the Agency did not have the ability to impose specific limitations designed to achieve water quality standards. Now that the LTCP has been finalized - and is being implemented - EPA can do so. EPA believes that the specific performance standards expressed as water quality-based effluent limits do not constitute backsliding. On the contrary, these provisions, as opposed to the very general prohibition against discharging in excess of water quality standards, are more proscriptive and stringent. EPA has concluded that implementation of the LTCP will not preclude compliance with WQS. Therefore, use of the LTCP performance standards as WQBELs does not violate 122.4(d), which precludes issuance of a permit that cannot ensure compliance with WQS of all affected states. Moreover, the use of the performance standards is consistent with and conforms to the requirements of the 1994 CSO Policy as it pertains to WQS in Phase II CSO permits. If it is determined, based upon post-construction monitoring, that the LTCP controls fail to achieve WQS, then EPA intends, consistent with the CSO Policy, to require the permittee to take additional steps to achieve WQS and shall modify or reissue the permit accordingly and use an additional enforceable mechanism as necessary.

2. Consistency with TMDL requirements.

Comment: The permit must, but does not, contain effluent limits that assure compliance with Waste Load Allocations (WLAs), because compliance with TMDLs and WLAs is necessary to assure compliance with WQS.

Response: Based on 40 C.F.R. §122.44(d)(vii)(B), the permit will ensure consistency with the assumptions and requirements of applicable WLAs though the permit limitations and conditions requiring implementation of the LTCP according to the performance standards in Part III. Sections C.2.A.3 through C.2.A.9. Development and articulation of those performance standards took the WLAs into account, using the same modeling that EPA and/or the District of Columbia used to derive the WLAs for CSOs for the Anacostia River and Rock Creek (including its Piney Branch Tributary) in applicable approved TMDLs.[1] Ultimately, EPA intends to evaluate the post-construction monitoring required by the permit to ensure consistency between these permit controls and the assumptions and requirements of the applicable TMDL WLAs. Over the duration of the LTCP implementation, additional "real world" data will be developed enabling the permittee, as well as EPA, to ensure the effectiveness of the performance standards and the validity of the modeling used to develop both the LTCP and the applicable TMDLs. If EPA determines that the LTCP performance standards do not ensure consistency with the assumptions and requirements of any applicable TMDL WLAs, EPA may require the

permitee to develop and implement additional controls as necessary to ensure consistency with the assumptions and requirements of applicable WLAs.

3. Nutrients

Comment: The proposed modifications fail to ensure compliance with WQS in the Chesapeake Bay. The interim limit of 8.6 million pounds per year is more than three times the nitrogen cap load allocation for the entire District of Columbia and four times the District's allocation to Blue Plains, and almost double the total Blue Plains cap when Maryland and Virginia allocations are added. The interim goal of 5.8 million pounds per year, is also in excess of the cap allocations for Blue Plains. The deferral of effluent limits to meet the nitrogen cap loads violates the letter and spirit of the Chesapeake 2000 Agreement, and state and federal antidegradation policies.

Response: As noted above, EPA has decided to impose a final nitrogen limit for the Blue Plains facility.

Comment: The proposed permit includes a schedule for submission of an action plan, however, this is not sufficient to ensure compliance with WQS. There is no requirement for a deadline to achieve the relevant cap loads under the plan. There is no provision for implementation of the plan.

Response: The schedule proposed in the draft permit modification was intended to provide assurance that studies necessary to identify new nitrogen removal technologies and pilots for evaluating their efficiency are performed in an expeditious manner. As indicated above, there is no compliance schedule in the final permit modification.

4. Consistency with Tributary Strategies.

Comment: The modified permit violates the Region's permitting approach which commits EPA to place nitrogen and phosphorus limits in NPDES permits which are consistent with state tributary strategies. The proposed loads are far in excess of the loads provided in the Maryland, Virginia and District of Columbia tributary strategies.

Response: The final nitrogen limit is consistent with the tributary strategies. EPA has not proposed a change to the existing phosphorous limits, therefore, there is no basis for comment on that limit at this time.

5. Violation of CWA § 117(g).

Comment: Section 117(g) of the CWA provides that EPA shall ensure that management plans are developed and implemented: a) to achieve and maintain the nutrient goals of the Chesapeake Bay; b) the water quality requirements necessary to restore living resources in the Chesapeake Bay ecosystem; c) the Chesapeake Bay Basin wide Toxins Reduction and Prevention Strategy goal; d) habitat restoration, protection, creation, and enhancement goals set by Bay signatories; and e) the restoration, protection, creation, and enhancement goals set by the

Bay signatories for living resources associated with the Bay ecosystem. Because the permit does not require the attainment of the nitrogen cap loads for Blue Plains, it violates the above section of the CWA.

Response: EPA believes that the August 18, 2006 proposal was fully consistent with Section 117(g) of the CWA, as it would have imposed a specific nitrogen limit, rather than a goal, as in the previous permit, and it would have required the permittee to begin to take certain steps toward achievement of the final limit - which was referenced in the fact sheet. In any event, EPA is now including a final nitrogen limit in the permit.

E. Comments received from the State of Maryland. The following comments were received by letter dated September 27, 2006, from Kendl P. Philbrick, Secretary.

Comment: The Maryland Department of the Environment (MDE) supports the change from an interim annual total nitrogen goal of 8.6 million pounds per year, and the inclusion of a stricter goal of 5.8 million pounds per year. The permit does not contain a provision that the goal is an interim measure which will be replaces by a limit of 4.689 million pounds per year total nitrogen as required for the Blue Plains facility in order to meet its final Chesapeake Bay allocation. MDE suggests language referencing the final required total nitrogen limitation of 4.689 million pounds per year.

Response: As noted previously, rather than simply referencing the Chesapeake Bay allocation for the Blue Plains facility, EPA has imposed that allocation as a limit in the final permit modification.

F. **Comments received from the Commonwealth of Virginia.** The following comments were received by letter dated October 5, 2006 from Ellen Gilinsky, Ph.D., Director, Division of Water Quality Programs.

Comment: The Virginia Department of Environmental Quality is in agreement with the provisions in the modified permit that replace the TMDL-derived limits and water quality-based requirements for combined sewer overflow discharges by implementation of the LTCP and the limits expressed in the permit are progressing towards meeting the final 2010 Chesapeake Bay agreements.

Response: No response is necessary.

G. Certification of the modified draft permit. The following comments were received by letter dated October 31, 2006, from Elisabeth Berry, Acting Director, DC Department of the Environment (DCDOE).

Comment: DCDOE certified that the draft modified permit will not violate the DC WQS and recommends that EPA modify the following tow conditions in the permit:

1. Amend the interim nitrogen limit to incorporate a safety factor based on best practicable waste treatment technology; and

2. Extend the proposed implementation schedule.

Response: EPA has considered the District's comments. As discussed above, EPA has replaced the interim limit with a final total nitrogen limit and has not included a schedule in the permit.

III. Comments and Responses - December 14, 2006 Public Noticed Draft Permit

A. Comments received from WASA. The following comments were received by letter dated January 18, 2007, from John T. Dunn, P.E., Chief Engineer/Deputy General Manager.

EPA notes that this letter provides comments on both the proposed final nitrogen limit and the proposed revisions to th Phase II CSO conditions which were in the August 18, 2006 public notice. The December 14, 2006 public notice was limited to the proposed final nitrogen limit, as no further changes to the Phase II CSO provisions were proposed and the opportunity for comment on those had already been provided. Therefore, EPA is not responding to those additional comments here, as they have been addressed in the response to the August 18, 2006 comments.

1. WASA set forth four general comments:

a. EPA fails to offer a plausible explanation and justification for the allocation that is the basis for the proposed limit;

b. The process used to derive the allocation for the District of Columbia is arbitrary and results in flaws in the proposed limit;

c. EPA should have waited to proposed the final limit until after receipt of WASA's plan for complying with the limit while meeting its existing CSO control obligations; and

d. EPA failed to include a nitrogen limit compliance schedule in the permit.

2. **Background.**

Comment: WASA has been a leader in voluntarily controlling the discharge of nitrogen under the Chesapeake Bay program.

Response: This is not a substantive comment; the commenter has merely set forth a recitation of its voluntary efforts to control nitrogen discharges and noted its plans to make internal improvements to maintain its current biological nitrogen removal capacity. Therefore, no response is necessary.

Comment: WASA's combined sewer obligations pose unique challenges to WASA's efforts to control the discharge of nitrogen at Blue Plains. The proposed total nitrogen

limit will require significant expenditures involving major plant upgrades to the limit of technology. While meeting the nitrogen limit WASA must also meet its other wet weather obligations. The ability to do this depends on EPA's approval of WASA's TN/Wet Weather Plan and modifications to the existing wet weather flow treatment obligations as exemplified by the permit and LTCP consent decree.

Response: This comment relates to the technological aspects of achieving the final nitrogen limit, as it addresses an operational issue. This comment also relates to costs because the permittee has asserted that it could meet the proposed nitrogen limit with the existing peak flow treatment regime, but that it would be significantly more costly. See page 40 of the first document in Attachment 1 to WASA's January 18, 2007 comments. The document, a power point presentation, is entitled "Strategic Process Engineering, Alternatives Workshop for Blue Plains Users and Regulators" March 13, 2005, and the heading for page 40 is: "Summary of Results: table setting forth cost projections for various alternatives for treatment of CSO flows and nitrogen removal mechanisms."

The courts have consistently held that cost and technological considerations are not appropriate factors to consider under the CWA when setting water quality -based effluent limits (WQBELs). See, e.g., In re City of Scituate Wastewater Treatment Plant, E.A.D., (April 19, 2006) (EPA did not commit clear error by not considering cost of compliance when establishing WQBELs), In re Westborough and Westborough Treatment Plant Board, 10 E.A.D. 297 (EAB 2002) (permit-writing authorities are required under CWA §§ 301 (b)(1)© and 402(a) to set permit limitations necessary to meet water quality standards set by states and approved by EPA, even if more stringent than those required under technology-based limits), In re City of Moscow, 10 E.A.D. at 168., In re New England Plating Co., 9 E.A.D. 726, 738 (EAB 2001) **(** finding that CWA does not make exceptions for cost or technological feasibility)., In re Town of Hopedale, NPDES Appeal No. 00-04, at 24 (EAB, Feb. 13, 2001) (Order Denying Review)., see also, e.g., Defenders of Wildlife v. Browner, 191 F.3d 1159, 1163 (9th Cir. 1999) (holding that EPA is obligated to set water quality standards without regard to practicability)., United States Steel Corp. v Train, 556 F. 2d 822, 838 (7th Cir. 1977) (finding "states are free to force technology and [i]f the states wish to achieve better water quality, they may [do so], even at the cost of economic and social dislocations ***.").

Comment: WASA's District rate payers are disadvantaged relative to ratepayers in neighboring Chesapeake Bay states, because of projected rate increases as a result of the cost of compliance and the lack of state grant programs and nutrient credit exchange.

Response: This comment addresses cost considerations related to compliance. See response above. EPA has imposed a final nitrogen limit, as it was developed with the tributary strategies and the water quality standards of the downstream affected states of Maryland and Virginia. To the extent that the permittee cannot immediately comply with the nitrogen limit, EPA has engaged and continues to engage in negotiations with the permittee to develop a compliance schedule. Factors such as cost have been taken into account in EPA's discussions with WASA regarding a compliance schedule.

Comment: Because the CSO system is located entirely within the District's

boundaries, the financial burden (>$2 billion) will fall on the rate payers of the District of Columbia. Even before the cost of nitrogen control is added, District ratepayers will be responsible for rates approaching 1.7 percent of median household income by 2024. The nitrogen limit will add an additional $1.2 billion in capital costs (2006 dollars) and $23 million annually to operating costs. District rates are projected to increase to more than 1.9 percent of median household income when the District ratepayer's share of these costs (approximately $500 million and $9 million, respectively) is added to the current rate of projections. Further, annual rate increases for District residents are projected to average more than 10 percent per year for at least the next 10 years during implementation of the nitrogen and CSO programs.

Response: See response above regarding EPA's responsibility to consider costs when it issues NPDES permits.

Comment: Ratepayers in Virginia and Maryland benefit from state grant programs that pay a significant portion of the cost of capital upgrades needed to meet Chesapeake Bay related nutrient limits. The District's ratepayers cannot benefit from such a program as the small population within the District would be the only source of revenue to fund a grant.

Response: See response above.

Comment: The residents of Virginia benefit from a nutrient credit exchange program.

Response: See response above.

3. The process used to establish the Blue Plains allocation.

Comment: The December 2003 Chesapeake Bay allocation document, *Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads, The Collaborative Process, Technical Tools and Innovative Approaches,* EPA 903-R-03-007, (Bay Allocation Document)(which is part of this record and may be seen in its entirety at www.chesapeakebay.net/pubs/doc-allocating-whole.pdf), sets forth five principal elements of the initiative. Of the five, WASA objects to element 4, which sets forth a process for allocating the Bay-wide caps among the states and individual Bay tributaries. This allocation process produced a total nitrogen cap load allocation of 2.4 million pounds per year (mpy) for the District of Columbia. The DC government than allocated 280,000 pounds per year of this allocation to the District's non-point sources and 5,300 pounds per year to WASA's CSOs, leaving 2,115,000 pounds per year as the District's allocation for Blue Plains. Maryland allocated 1,993,000 pounds per year of its Potomac tributary nitrogen allocation to Blue Plains for the Maryland jurisdiction served by the plant, and Virginia allocated 581,000 pounds per year of its Potomac tributary nitrogen allocation to Blue Plains for the Virginia jurisdictions served by the plant. This produced a total Blue Plains nitrogen allocation of 4,689,000 pounds per year which is the limit proposed in the modified draft permit.

WASA objects to the process used to arrive at the 2.4 mpy nitrogen allocation for

the District of Columbia as well as the allocation itself and proposes that the allocation be increased.

Response: EPA, in coordination with other members of the Chesapeake Executive Council (collectively, the Bay Partners, which include EPA and New York, Pennsylvania, West Virginia, Virginia, Maryland, Delaware and the District of Columbia) is required by the CWA to ensure that management plans are developed to, among other things, achieve and maintain the nutrient goals of the Chesapeake Bay Agreement. There is much discretion as to how to allocate the allowable loading to the states. As partners in the Bay cleanup, all of the Bay states allocated the allowable nutrient loading to each of the states based primarily upon a desire to be fair and equitable. The process used to allocate the loadings is described in the December 2003 Bay Allocation document. This document is the culmination of several years of discussions among the principals and staff of the Bay states. This effort resulted in, among other things, an agreement between the Bay Partners and the US EPA to cap annual nitrogen loads delivered to the Bay's tidal waters at 175 million pounds per year.

These reductions were based on Chesapeake Bay Water Quality Model projections of attainment of published Bay dissolved oxygen criteria applied to the refined tidal water designated uses.

The allocation process was based upon five elements: 1) EPA's publication of water quality criteria and designated uses for the Bay, 2) adoption of water quality standards by the individual Bay states based upon the Bay criteria and uses, 3) establishment of Bay-wide nitrogen, phosphorous and sediment load caps by the Bay program partners to achieve the standards, 4) a Bay program process for allocating the Bay-wide caps among the states and individual Bay tributaries, and 5) adoption of tributary strategies by the states which allocated the loads under each tributary cap first between point and non-point sources in the tributary and then allocated the point source nitrogen and phosphorous loads among the individual point sources within each tributary. Element 4 which is the process for allocating the Bay-wide caps among the states is the element that resulted in the 2.4 mpy nitrogen allocation to the District.

In connection with element 4, the Bay Partners also developed a framework to achieve a fair and equitable approach to the allocations for each state. This framework included three underlying principles to guide the allocation process: 1) basins that contribute the most to the problem must do the most to resolve the problem (the states whose discharges have a greater effect on the dissolved oxygen problems in the middle mainstem of the Bay have the greatest influence on the problem), 2) states that benefit most from the Chesapeake Bay recovery must do more (states that encompass the Chesapeake Bay and its tidal tributaries within their boundaries, e.g., Virginia, Maryland, Delaware and the District, realize greater profits from such things as improved water quality and tourist dollars than other states) and 3) all reductions in nutrient loads are credited toward achieving final assigned loads. This is intended to avoid penalizing states that have achieved nutrient reductions and a baseline load was applied. Thus, all past and existing best management practices and treatment upgrades promoted by the states were credited toward the needed reductions.

Application of the above elements resulted in a summary of results presented as

Table IV-5 on pages 100 and 101 of the Bay Allocation Document. The relevant nitrogen information for the District and the Pennsylvania portion of the Susquehanna basin is summarized below:

Jurisdiction-Basin	Allocation	Percent Reduction of Anthropogenic[2] Load
Potomac - DC	2.80 million pounds	61.6
Susquehanna - PA	69.08 million pounds	55.4

The allocation represents the allowable load for that basin/jurisdiction that results from the application of the allocation principles and further reductions agreed upon by the Bay Partners in order to achieve an overall total allowable nitrogen loading to the Chesapeake Bay of 175 million pounds per year. The percent reduction of anthropogenic load is the loading above the natural (forested) loading if all of the treatment controls for all sources (point and non-point) were turned off. This loading is derived from the Chesapeake Bay Watershed model and is explained in the Bay Allocation Document.

It should be noted that the 'percent reduction of anthropogenic load' noted in the table above, is a simplistic notion of equity and therefore, was not the sole determinant in establishing the allocation among the states. Due to the complex nature of pollutant loadings, especially from non-point sources, one state may be able to achieve a higher percent reduction of loadings with a lower level of effort (e.g., application of the fewer Best Management Practices). For this reason, additional considerations needed to be employed to yield a process that was agreeable to the Bay partners for fair and equitable allocation of the allowable pollutant loadings. This is further described in the 2003 document.

These principles and process in the Bay Allocation Document and the allocations which were derived from them resulted in a basin wide total of 187.15 mpy. This was a shortfall of 12 million pounds from the bay-wide cap load of 175 mpy which had been determined by modeling to be the assimilative capacity of the Chesapeake Bay. In order to reduce this shortfall, a meeting of the Bay Partners was held. At that meeting, EPA committed to reduce the shortfall by 8 mpy by implementing the Clear Skies initiative, which is intended to reduce the load of airborne nitrogen. Each state then evaluated its ability to contribute to reducing the remaining 4 mpy total nitrogen. The District of Columbia agreed to reduce its allocation from 2.80 mpy to 2.40 mpy. That agreement is the basis of the District's final allocation.

4. The District's allocation and process used to arrive at the allocation are seriously flawed.

Comment: There is nothing in the record to show that the Bay program followed its three principles (e.g., 1) basins that contribute the most to the problem must do the most to resolve the problem; 2) the states that benefit most from the Chesapeake Bay recovery must do more; 3) all reductions in nutrient loads are credited for achieving final assigned loads, to arrive at the District's nitrogen allocation. The principles were incorrectly applied to the District resulting in a smaller allocation for the District and, in turn, the District's share of the Blue Plains

allocation. The District's allocation would have been larger had the principles been correctly applied.

The flaws in the allocation process are reflected in the way in which the nitrogen allocation for the District and Pennsylvania's Susquehanna River basin were arrived at and the resulting allocations. A correct application of the principles would have led to a larger percent nitrogen reduction for Pennsylvania's Susquehanna River basin than the percent reduction for the District. However, the preliminary nitrogen allocation for Pennsylvania's Susquehanna River calls for dischargers to that basin to achieve nitrogen reductions totaling 55.4 percent over the baseline, while the District's nitrogen load reduction requirement was set at 61.6 percent. Although correctly concluding that the Susquehanna River was a "high" impact on Bay tidal water quality and that the Potomac River has a "moderate" impact, EPA erroneously assumed that under principle 2 that as a "tidal" jurisdiction, the District would benefit equally with Maryland and Virginia from the Bay's recovery.

Given its location at the headwaters of tidal influence, the District is marginally a tidal jurisdiction, but it was plainly wrong for the Bay Program to assume that the District would benefit equally with Maryland and Virginia from the Bay's recovery. The nutrient reductions are driven largely by water quality in the main stem of the Bay. The benefits to the District from the Bay's recovery pale in comparison to the benefits to Maryland and Virginia. The District derives no more benefit from improved water quality in the main stem of the Bay than does Pennsylvania. Water quality in the main stem of the Bay, on the other hand, is of immense value to Maryland and Virginia.

Response: Nutrient reductions are driven largely by water quality in the tidal portions of the bay watershed. The allocation of the allowable loadings is driven by a complex set of facts which include, but are not limited to, geography, land use and proximity to the Bay. The process for allocating these loadings is described above and in the Bay Allocation Document. The Bay Partners agree that jurisdictions that have tidal waters in the Bay watershed will benefit more from the reduction of nutrients. The waters of the Potomac River under the jurisdiction of the District of Columbia are tidal. Furthermore, the nutrient reductions prescribed for the Bay watershed not only benefit the Chesapeake Bay but also benefit the tidal Potomac River which has experienced historical and at times very significant algal problems from excessive nutrients.

Comment: The program arbitrarily failed to correctly apply its own allocation principles resulting in nitrogen allocations that call for a greater percent reduction for the District than the percent reduction required of Pennsylvania's Susquehanna River basin even though the District's discharges have less impact on the problem than Pennsylvania's Susquehanna dischargers and even though the District receives no greater benefit from water quality improvements in the main stem of the Bay than the benefit received by Pennsylvania.

The Bay program compounded its erroneous application of its principles by arbitrarily reducing the District's nitrogen allocation from 2.8 mpy to 2.4 mpy in order to bring the allocations in line with the Bay-wide cap. Other nitrogen allocations were reduced as well, bu it is clear from Table IV-7 of the Bay Allocation Document that, on a percentage basis, the

District's nitrogen allocation was reduced more than the nitrogen allocation of any other jurisdiction. Particularly significant is the relative percent nitrogen reductions required of the District compared to Pennsylvania's Susquehanna River basin. While acknowledging that, on a pound-for-pound basis, nitrogen reductions in the Susquehanna basin are a greater benefit to water quality in the Bay than nitrogen reductions in the Potomac basin, the Bay program increased the percent reduction in the nitrogen allocation for the District from 61.6 percent to 67.2 percent (from 2.8 mpy to 2.4 mpy) while only increasing the percent reduction in the nitrogen allocation for the Susquehanna River basin from 55.4 percent to 57.1 percent (from 69.08 mpy to 67.58 mpy). The bay program offered no explanation or justification for those reductions.

Response: As discussed above, the Bay program did not arbitrarily reduce the District's nitrogen allocation from 2.8 mpy to 2.4 mpy. The District voluntarily agreed to the lower cap as did each of the tidal jurisdictions. As explained above, EPA disagrees with WASA' s assertion that equity can be expressed simply as a matter of percent reduction. It is much more complex. For example, the allocated loading for the District portion of the Blue Plains facility is a concentration equivalent of 4.6 mg/l total nitrogen. The allocated loading to Blue Plains from Maryland and Virginia is a concentration equivalent of 4 mg/l total nitrogen. Therefore, on a concentration basis, Maryland and Virginia have allocated less to Blue Plains than the District of Columbia. Based on this analysis, one could argue that the District was allocated too much loading with respect to Maryland and Virginia.

5. EPA is obliged to correct the deficiencies in the allocation developed by the Bay Program and to consider the District's unique circumstances before using the allocation as the basis for the nitrogen limit in the Blue Plains permit.

Comment: EPA did nothing more than assume that the District's 2.4 mpy nitrogen allocation and the resulting 2,115,000 pounds per year District portion of the Blue Plains nitrogen allocation were a valid basis for establishing and imposing a nitrogen limit in the Blue Plains permit. Consequently, EPA has failed to fulfill its obligation to consider the water quality benefit and fairness of the District's allocations derived from the wholesale process described above; the extraordinary financial burden of WASA's CSO control obligations on District ratepayers; the complexities and difficulties inherent in controlling nitrogen to levels approaching the limit of technology while treating massive volumes of wet weather flow from the District's combined sewer system; grant funding for nitrogen control available to ratepayers in Virginia and Maryland, but not to ratepayers in the District; and WASA's inability to trade for nitrogen credits to comply with the limit.

Response: Once the Bay allocations were made, Maryland, Virginia and the District of Columbia amended their water quality standards (WQS) to reflect the agreements. Because the waters of the downstream states of Maryland and Virginia are impacted by the large volume of flow from the Blue Plains facility, EPA used their WQS and the Bay cap as the basis for the Blue Plains nitrogen limit. To the extent that the permittee cannot immediately comply with the nitrogen limit, EPA has engaged in negotiations with the permittee to develop a compliance schedule. Factors such as cost have been taken into account in EPA's discussions

with WASA regarding a compliance schedule.

Comment: WASA proposed that the District's total nitrogen allocation be modified to reflect the same percent reduction required of the Pennsylvania Susquehanna River basin. This would change the percentage reduction required of the District from 67.2 percent to 57.1 percent, resulting in an increase in the District's nitrogen allocation from 2.4 mpy to 3.14 mpy. WASA also proposes that the shares of the District' allocation assigned to non-point resources (280,000 pounds per year) and CSOs (5,300 pounds per year) remain unchanged, resulting in an increase in the District's portion of the allocation to 2,845,000 pounds per year and in increase in the total Blue Plains allocation to 5,419,000.

Response: EPA was only one party to the allocation agreements, accordingly it cannot modify the agreement to benefit any one of the parties. Furthermore, as explained above, EPA and the other Bay Partners established the allocations to the states based on what was accepted to be fair and equitable based upon the principles and process set forth in the allocation documents.

6. The proposed nitrogen limit is premature.

Comment: EPA and WASA have been working for some time on critical issues related to meeting the nitrogen limit. Unless the issues related to the peak flow are resolved and the permit is amended to reflect a lower peak flow, and the Consent Decree is amended to provide for enhanced clarification, WASA must spend millions of dollars more than necessary to comply with the nitrogen limit. EPA should not have proposed a limit before receiving WASA's Total Nitrogen/Wet Weather Plan.

Response: See response at III.A.2 above relating to EPA's NPDES permitting responsibilities with regard to cost. EPA has been working with WASA, and will continue to do so to identify and resolve the issues related to the development and implementation of a plan, including a schedule to achieve compliance with the nitrogen limit. In the meantime, EPA is committed to moving forward with the goals of the Bay Agreement, and is responding to the EPA-approved revisions to the WQS of the affected states which reflect the Bay criteria.

7. EPA should have included a schedule in the permit that would give WASA a reasonable period of time to comply with the final nitrogen limit.

Comment: EPA has stated that it intends to establish a schedule through "a separate enforceable document to be issued simultaneously with the final permit." The failure to establish a schedule in the permit violates EPA's own regulations. Further, it leaves WASA as the only discharger in the Chesapeake Bay watershed without a permit schedule to meet a nitrogen based limit. EPA's regulations at 40 C.F.R. 122.47(a) require schedules of compliance where they are necessary. The modified permit requires compliance with a nitrogen limit sooner than possible. All relevant criteria governing the establishment of a compliance schedule are satisfied in this case.

Response: The regulation governing compliance schedules in NPDES permits,

simply provides that: "the permit **may**, when appropriate, specify a schedule of compliance leading to compliance with the CWA and regulations. 40 C.F.R. § 122.47(a), emphasis added. Also, 40 C.F.R. § 122.43(a) provides that the permitting authority "shall establish conditions, as required, on a case-by-case basis, to provide for and assure [permit] compliance, " and includes among the potential conditions schedules of compliance based on the provisions of 122.47 (a). Thus, the decision whether to include a compliance schedule in a permit is made on a case-by-case basis, at the discretion of the permitting authority.

Compliance schedules may be used to provide dischargers with the time they need to meet water quality-based effluent limits and may be included in NPDES permits where allowed by the CWA and the supporting federal regulations. The CWA only allows for compliance schedules in permits for effluent limits based on water quality standards adopted or substantively revised after July 1. 1977, and, if the state's water quality standards or implementing regulations clearly authorize the use of compliance schedules. This principle comes from the Administrator's decision in an NPDES permit appeal, In the Matter of Star-Kist Caribe, Inc., 3 E.A.D. 172, 177 - 178 (1990).

Nothing in the Star-Kist decision or EPA's implementing regulations requires EPA, as the permitting authority, to give the permittee a compliance schedule, in the permit or otherwise. It is often the case that where a permittee cannot comply with a permit term, the permit and a consent agreement or consent decree are issued simultaneously, or in some cases a permit is issued and followed by an enforcement action.[3]

The CWA defines a "schedule of compliance" as " an enforceable sequence of actions or operations leading to compliance with and effluent limitation, other limitation, prohibition or standard." Section 502(17). Based upon EPA's discussions with WASA, the plant upgrades necessary to achieve the nitrogen limit could take several years. They will primarily involve retrofitting of existing plant processes. This will not lend itself well to the use of an annual interim requirements and dates for their achievement on at least an annual basis as required for compliance schedules in permits. See, 40 C.F.R. § 122.47(a)(3). Placing the compliance schedule in a separate enforceable document will therefore, give the permittee and the agency more flexibility in establishing interim requirements.

While not ruling out other enforceable mechanisms, in this case, EPA considers it to be most appropriate to use the existing LTCP Consent Decree as the enforceable mechanism in which to place the compliance schedule. Many of the options for achievement of the nitrogen limit WASA has presented to EPA involve changes to the existing LTCP, the requirements and schedule for which are set forth in the LTCP Consent Decree between EPA and WASA. Any modifications to the LTCP will require modification of the Consent Decree. Therefore, approval of a Total Nitrogen/Wet Weather Plan will result in a modification of the LTCP Consent Decree to change the LTCP requirements. The Consent Decree contains specific provisions regarding revisions to the LTCP that include public participation. The LTCP Consent Decree requires that for modification of the LTCP the must be public participation. In addition, any such LTCP Consent Decree modification would be subject to public comment prior to entry by the Court.

8. Proposed revisions to Phase II CSO conditions.

Comment: The proposed standards compliance requirement at Part III.E.1 does not conform to the CSO Policy. WASA objected to the language at Part III.E.1 when the first permit modification was issued in December of 2004. WASA has set forth its objections in its April 16, 2004 comment letter and its January 18, 2005 Petition for Review.

Response: As noted above, EPA did not solicit additional comment on the Phase II CSO provision, as comments were already solicited and received based upon the August 18, 2006 public notice. See EPA's response at II.A.2 above.

Comment: WASA supports the proposed modification to delete the TMDL-derived limits in Part III.E. 2 to 4.

Response: No response is required.

Comment: The permit should contain a compliance schedule for implementation of the selected controls in WASA' s LTCP.

Response: See EPA's response to WASA's comments on the August 18, 2006 proposal.

Comment: WASA requests that EPA modify Part IV.A.1.b of the permit to authorize WASA's annual pretreatment report to be submitted by March 31 rather than February 28. This would synchronize the submittals of several jurisdictions.

Response: EPA is open to considering this change in the next permit reissuance cycle, provided WASA makes such a request in writing when it submits its permit application. However, that provision of the permit was not addressed in the proposed modification, so no response to this comment is necessary.

B. Comments received from the Blue Plains Regional Committee of the District of Columbia Council of Governments (COG). The following comments ere received by letter dated January 19, 2007, from Joseph Zorica, BPRC Chair, Washington Suburban Sanitary Commission.

Comment: A mutually agreed to and realistic implementation schedule should be included in the permit that also recognizes current funding constraints.

Response: See EPA responses to the related comments by WASA, above.

Comment: The proposed permit should not be issued until the Total Nitrogen/Wet Weather Plan has been completed and its findings incorporated into the permit conditions.

Response: See EPA response to the related comment by WASA, above.

Comment: A major infusion of federal grant funding should be made available to address those significant and long-term costs, and permit language should be included to allow nutrient trading with other interstate partners in the Potomac watershed.

Response: See EPA response to the related comment by WASA, above.

Comment: EPA should remove the water quality standards compliance requirements from Part III.E.1.

Response: See EPA response to the related comment by WASA, above.

Comment: BPRC agrees that the TMDL-derived limits should be removed from the modified permit.

Response: No response is required.

C. Comments received from the Chesapeake Bay Foundation (CBF). The following comments were received by letter dated January 19, 2007, from Beth McGee, Ph.D.

Comment: While the CBF agrees with the final nitrogen limit, it asserts that the compliance schedule should also be subject to public notice and comment, arguing that the schedule is part of the permit and therefore, should be open to comment.

Response: A compliance schedule is subject to the public notice and comment procedures of the CWA and the regulations when it is included in and thus a part of the permit. Those regulations do not require notice and comment when the compliance schedule is in an enforcement document. However, EPA is aware of the public interest in the improvement of the water quality in the Chesapeake Bay and the goals of the Chesapeake Bay Agreement. EPA intends to assure that interested parties have an opportunity to express their views before finalizing any compliance schedule with WASA. EPA intends to place the compliance schedule in the LTCP Consent Decree. As noted above, the LTCP Consent Decree provision relating to material modification of the LTCP provides for additional public participation in the development of any such proposal ultimately submitted to EPA for approval. This, along with public notice of any LTCP Consent Decree modification would provide a meaningful opportunity for public comment on the proposed compliance schedule.

Comment: EPA's failure to include a compliance schedule in the permit contradicts the Agency's statements regarding regulations of nutrient discharges from point sources in the watershed. The commenter cites to pages 36 - 38 of EPA's Decision on Petition for Rulemaking to Address Nutrient Pollution From Significant Point Sources in the Chesapeake Bay Watershed (Petition Decision), commenting that in that document EPA stated that it has existing authority to ensure that NPDES permits contain appropriate permit limits based on the revised water quality standards by the 2010 deadline and that EPA would object to permits that do not provide such assurances. The commenter also comments that in its NPDES Permitting Approach for Discharges of Nutrients in the Chesapeake Bay Watershed (December 2004) (Bay

Permitting Approach) EPA stipulated that "when the revised Maryland WQS are effective, EPA and the state NPDES permitting authorities agree to issue NPDES permits...consistent with the applicable tributary strategy", p2. and that compliance schedules should be in keeping with the 2010 objective of the Chesapeake Bay Agreement.

Response: The commenter has mischaracterized EPA's Petition Decision. In declining to grant the commenter's request that the Agency promulgate a number of new rules to address nutrient pollution from significant point sources in the Chesapeake Bay watershed, EPA stated - relative to a request for the adoption of an additional rule to specifically require that existing permits be issued with nutrient limits adequate to protect the Bay: "As discussed above, the CWA and NPDES permitting regulations already impose an obligation to include water quality-based limits in permits where necessary. EPA retains the discretionary authority to object to any NPDES permit issued by a State that does not contain such a limit." Petition Decision, page 37. EPA's action today is consistent with the Petition Decision. Likewise, EPA's decision to include the compliance schedule in a separate enforceable document is consistent with the Bay Permitting Approach, which provides that EPA and the state NPDES permitting authorities agree to: "...Incorporate compliance schedules, as needed and appropriate, into permits or **other enforceable mechanisms**....Generally, these compliance schedules should require the facility to come into compliance with the nutrient based requirements of the permit or order as soon as possible in keeping with the 2010 time line and objective of the Chesapeake Bay Agreement." page 2, emphasis added. Nothing in EPA's proposal to include a compliance schedule in a separate enforceable document is inconsistent with this.

Comment: Both Maryland and Virginia have issued similarly situated discharge permits that have included, when necessary, compliance schedules as part of the permit itself. EPA should do so here.

Response: See responses above discussing the Agency's decision in this case that it is appropriate to place the compliance schedule in a separate enforcement document, and noting the there will be public input into the schedule. As the commenter notes, the Blue Plains facility is by far the largest point source of nitrogen and phosphorous in the Bay watershed. The treatment plant is the largest in the watershed. While WASA has already made significant voluntary reductions in its nitrogen discharges, meeting its final nitrogen limit, while at the same time fulfilling its obligations for control and treatment of CSOs, will require significant plant construction and retrofitting as well as costs.

D. **Comments received from EarthJustice.** The following comments were received by letter dated January 19, 2007, from David S. Baron, Attorney and Jennifer C. Chavez, Attorney.

Comment: EarthJustice strongly supports setting more protective annual limits on the discharges from the Blue Plains facility, effective immediately upon the permit's issuance. The commenter goes on to set forth several reasons why it believes that the imposition of th proposed nitrogen limit "or more protective limits" (although the commenter offers on discussion of what might be "more protective" and/or what more protective limit might be or how it would be derived).

Response: No response is required.

Comment: EPA states that it intends to establish a schedule for compliance with the nitrogen limit in a separate enforceable document. EPA must provide meaningful opportunity for public comment prior to issuing a schedule, which must include a set of specific criteria for compliance and specified time lines for meeting the criteria.

Response: As stated in the fact sheet and in these comments, it is EPA's intent to establish a schedule for compliance in a separate enforceable document. EPA has and continues to engage WASA in discussions regarding modifications to the existing LTCP Consent Decree to include a plan and schedule to achieve the necessary nitrogen reductions. EPA has not ruled out the possibility of using other available enforcement options to require production of a plan and schedule to achieve the nitrogen limit. EPA recognizes that it is desirable to solicit public input on the schedule and intends to do so.

Comment: The permit must specify that the annual limit on total nitrogen is based on a rolling twelve month period, and that nitrogen discharges for any twelve month period shall not exceed the annual limit. The commenter asserts that: "the Anacostia River [sic] and the Chesapeake Bay's water quality needs are not defined by the calendar year."

Response: This comment is vague and unsupported. EPA has determined that annual limits for nitrogen for permits designed to protect the Bay and its tidal tributaries are appropriate. See, March 3, 2004 memorandum from the Director, Office of Wastewater Management to the Directors of the Chesapeake Bay Program and the Region 3 Water Permits Division, "Annual Permit Limits for Nitrogen and Phosphorous for Permits Designed to Protect Chesapeake Bay and its Tidal Tributaries from Excess Nutrient Loading Under the National Pollutant Discharge Elimination System." EPA concluded that, due to the characteristics of nutrient loading and its effects on the water quality in the Chesapeake Bay and its tidal tributaries and because the derivation of appropriate daily, weekly or monthly limits is not possible, it is impractical to express permit limitations as daily maximum, weekly average or monthly average limitations. EPA has conducted complex modeling of the effect of nutrient loading to the Bay, specifically from individual point source discharges. Based on the results of the model, EPA concluded that the Chesapeake Bay and its tidal tributaries in effect integrate variable point source monthly loads over time, so that as long as a particular annual load of nitrogen and phosphorous are met, constant or variable intra-annual load variation from individual point sources has no effect on water quality of the main Bay. Therefore, the 12-month calendar limit is appropriate.

Comment: The final permit must require adequate monitoring to measure total nitrogen discharges each month, so that compliance with the nitrogen limit can be determined for every 12-month period.

Response: The permit contains daily or per discharge monitoring requirements for nitrogen with the monthly reporting requirements. The amount of total nitrogen released in a 12-month period will be determined based upon the monthly monitoring reports.

E. **Comments received from the State of Maryland.** The following comments were received by letter dated January 12, 2007, from Kendl P. Philbrick, Secretary, Maryland Department of the Environment.

Comment: MDE supports the imposition of a total nitrogen effluent limit of 4.689 million pounds per year to comply with the nutrient cap allocation assigned to Blue Plains. MDE is concerned, however, regarding the lack of a specific timetable for meeting the required nitrogen reduction. MDE does not object to a schedule being included in a separate enforceable document to be issued simultaneously with the permit, but MDE withholds final comment on this permit until it can be reviewed with the compliance schedule.

Response: At the time or before the schedule contained in the consent decree is made available to public comment, EPA will share it with MDE.

F. **Comments received from the Commonwealth of Virginia.** The following comments were received by letter dated December 22, 2006, from Ellen Gilinsky, PhD, Director, Division of Water Quality Programs.

Comment: The modified permit appears adequate to protect water quality in adjacent Virginia waters; accordingly VA DEQ does not object to the issuance of the modified permit.

Response: No response is required.

G. **Comments received from the United States Fish and Wildlife Service.** The following comment was received by e-mail dated January 30, 2007, from Chris Guy, US Fish and Wildlife Service.

Comment: The United States Fish and Wildlife Service is unfunded for water quality work; accordingly, it is unable to provide reviews for NPDES permits.

Response: No response is required.

H. **Comments received from the United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service.** The following comments were received by letter dated January 23, 2007, from Mary A. Colligan, Assistant Regional Administrator for Protected Resources.

Comment: The National Marine Fisheries Service (NMFS) and EPA engaged in a Section 7 consultation in 2002 regarding the effects of the permit conditions on shortnose sturgeon. At that time NMFS concurred with EPA's determination that issuance of the permit is not likely to adversely affect any species under NMFS jurisdiction. The current proposed modifications comply with the Chesapeake Bay criteria upon which NMFS and EPA consulted in 2003. As the agencies have already consulted on the permit and the criteria, NMFS has determined that no additional Section 7 consultation is necessary at this time. However, NMFS,

US FWS and EPA are currently engaged in Section 7 consultation on EPA's water quality standards and aquatic life criteria. Should these consultations reveal effects that had not been previously considered, NMFS may reconsider whether or not additional consultation is necessary for this permit.

Response: No response is required.

I. **Certification of the modified draft permit.** The following comments were received by letter dated January 29, 2007 from Corey Buffo, Interim Director, DC Department of the Environment.

Comment: The DC DOE certified that the December 17, 2006 modified permit will not violate the Water Pollution Control Act of 1984, as amended, and is in accordance with the Water Quality Standards of the District of Columbia. The certification notes the following relevant water quality considerations;

1. WASA is not currently capable of achieving the new limit without new technologies being installed at Blue Plains; and

2. EPA should establish a compliance schedule for compliance with the nitrogen limit.

Response: See discussions relating to new technologies and the compliance

[1] The applicable TMDLs are those for total suspended solids (TSS) and biochemical oxygen demand (BOD). The TMDLs were challenged, based largely on EPA's establishment of annual, rather than strict daily allocations. A Court of Appeals ruling, reported as Friends of the Earth v. EPA, 446 F.3d. 140 (D.C. Cir. 2006) overturned the District Court's November 29, 2004 decision favorable to EPA regarding these TMDLs. The Court of Appeals found that the Anacostia TMDLs did not comply with the CWA requirements to contain daily loads of pollutants. Based on that finding, the Court remanded the TMDLs. The District Court has currently stayed the vacature of the TMDLs until July 15, 2007 (TSS) and June 2008 (BOD), so these TMDLs remain in effect while EPA is in the process of redoing them. If the ultimate revisions to the TMDLs result in significant differences in the wasteload allocations for the Blue Plains facility, this will be addressed in subsequent permitting actions.

[2] Anthropogenic - human impact on the environment.

[3]The District of Columbia, Maryland and Virginia WQS regulations all generally allow for compliance schedules in permits, at the permit writers discretion. While allowing compliance schedules for new water quality-based effluent limits, the DC WQS also provides that: "A compliance schedule shall be included in the permit." 21 DCMR 1105.9. EPA believes that this provision must be read in light of Star Kist, and, as EPA is the permitting authority, with EPA regulations. Therefore, EPA as the permitting authority, has discretion in determining whether inclusion of a compliance schedule in a permit is appropriate.